Cronk Road Bridge Spanning the St. Joseph River at Cronk Road Litchfield vicinity Hillsdale County Michigan HAER No. MI-22

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Mid-Atlantic Regional Office
National Park Service
U.S. Department of the Interior
Philadelphia, Pennsylvania 19106

HISTORIC AMERICAN ENGINEERING RECORD

Cronk Road Bridge

HAER No. MI-22

Location:

Spanning the St. Joseph River at Cronk Road, 0.4 mile south of Michigan state

highway M-99 and southeast of the village of Litchfield in Hillsdale County,

Michigan

Date of Construction: 1886

Builder:

Penn Bridge Works

Beaver Falls, Pennsylvania

Present Owner:

Hillsdale County Road Commission

1919 Hudson Road

Hillsdale, Michigan 49242

Present Use:

Vehicular bridge

Significance:

The pony truss bridge was determined to be eligible for inclusion in the National

Register of Historic Places in 1986.

Project Information:

This documentation was undertaken in 1987 in accordance with the Memorandum

of Agreement by the Hillsdale County Road Commission as a mitigative measure

prior to replacement of the bridge.

Stanley L. Clingerman, P.E.

Engineer-Manager

Hillsdale County Road Commission

The Cronk Road Bridge is a Pratt-type only truss bridge. A pony truss is referred to as a "half-through" truss bridge, in that the truss doesn't extend up and over the bridge deck. The superstructure is composed of the iron truss and a concrete jack arch deck for the roadway. The curb-to-curb bridge width is 15'6". The single span bridge has a structure length of 50 feet. The abutments are made of laid-up stone and masonry. The bridge is used for vehicular traffic, hence, there are no sidewalks on the bridge. It is currently closed to all traffic due to safety reasons.

The Cronk Road Bridge was built in 1886 by the Penn Bridge Works of Beaver Falls, Pennsylvania. This firm was an important eastern bridge builder in the late nineteenth century. The small, simple pony truss bridge design was extensively used in this area as evidenced by the five other pony truss bridges that still remain in this county. The county records do not indicate any reconstruction of the bridge, but it appears quite likely that the original deck was something other than the present concrete jack-arch deck. The bridge had a posted gross load limit of 3 tons since the 1960s. The bridge was ultimately closed to all vehicular traffic in October 1984 due to cracks in the end posts of the trusses and failing masonry abutments which undermined the bearings of the truss. Complete replacement of the bridge has been determined to be the best solution to reopening the roadway to traffic.

Exhaustive contacts with the local historical societies and pleas for historic information about the bridge from the general public, as requested in the local newspapers and radio station, could not add any local history about the bridge.

A search of the road commission's records revealed no engineering drawings or plans on file for the original structure or any reconstruction. Also, the manufacturer's plaque, which so often was attached to bridges of this type, is missing. Therefore, a photograph of the plaque unfortunately could not be taken, for preservation purposes.

LOCATION MAP 1 2 3 4 5 6 SCALE OF MILES

